

## ATB – DEPTH PERCEPTION TESTING

(DD Form 2808, Block 67. ‘DEPTH PERCEPTION’) [As of: 1 May 2002]

### **Important notes concerning the new DD Form 2808.**

The new DD Form 2808 has a pre-printed ‘AFVT’ in block 67. Although this is convenient for entering in the results of the Armed Forces Vision Tester (AFVT) depth perception test, it is not intended to exclude other authorized depth perception testing, such as the OPTEC 2300, the Random Dot (RANDOT) Circles Test or the Titmus Graded Circles Stereoacuity Test. If you do not use the AFVT, line through the pre-printed entry and record the test used with the proper score. If you use the AFVT and then also use another depth perception test, record the AFVT in block 67 and then record the additional depth perception test findings in block 60 (Other Vision Test) or block 73 (Notes).

### **Purpose/Indications.**

Mandatory for all FDMes. This measures fine depth perception through the ability to fuse stereoscopic targets.

### **Equipment.**

- AFVT (Armed Forces Vision Tester) or OPTEC 2300
- or -
- RANDOT (Random Dot Circles Test)  
with polarized glasses (included with test)
- or -
- Titmus (Titmus Graded Circles Stereoacuity Test)  
with polarized glasses (included with test)

### **Set-Up.**

#### AFVT (Armed Forces Vision Tester) or OPTEC 2300:

- Patient seated comfortably at the AFVT (or OPTEC 2300).
- Patient wears habitual spectacle prescription (if applicable).
  - May test without prescription but, if fails, retest with prescription.
- Test emulates distance test (optical infinity).
- Refer to manual for correct settings for model being used.

#### RANDOT (Random Dot Circles Test) **or** the Titmus (Titmus Graded Circles Stereoacuity Test):

- Patient wears habitual spectacle prescription (if applicable).
  - May test without prescription but, if fails, retest with prescription.
- Polaroid spectacles worn (over habitual prescription if also worn).
- Test distance is 40 cm (16 inches).
- Provide adequate light but avoid reflections from the test’s surface.
- Hold test upright to maintain the proper axis of polarization.
- Do not permit the patient’s head to tilt during testing.

## **Step-By-Step Procedure.**

### AFVT (Armed Forces Vision Tester) or OPTEC 2300:

- Refer to manual for correct settings for model being used.
- Group A is for demonstration purposes ONLY and should not be used as part of the actual test (see manual).
- Group B is at the level of the new overall standard of 40 seconds of arc; there are three presentations of five circles each within Group B.
- Patient identifies the circle within each presentation that appears 'closest'.
- Patient must correctly identify all presentations within Group B to pass.
- You may test beyond Group B if desired but it is not necessary.
- Record as "AFVT Group B – 40 arc sec PASS" or words to that effect.
- If fails any in Group B, retest using RANDOT and/or Titmus below.

### RANDOT (Random Dot Circles Test):

- There are ten presentations of three circles each in the RANDOT.
- You must test ALL ten presentations; do not stop after number seven.
- You must test all presentation IN ORDER; do not jump around since each level is progressively more difficult.
- Patient identifies the circle that appears 'closest'.
- Test until the patient misses two levels in a row.
- Record the last level passed successfully.
- For RANDOT, a minimum passing score is correctly identifying presentations 1 THROUGH 7 which equals 40 seconds of arc.
- Record as the number missed over the number possible.
  - For example, 'RANDOT 3/10 – 40 arc sec PASS' or words to that effect.
- If fails the RANDOT, may retest using AFVT/OPTEC 2300 or Titmus.

### Titmus (Titmus Graded Circles Stereoacuity Test):

- There are nine presentations of four circles each in the Titmus.
- You must test ALL nine presentations.
- You must test all presentations IN ORDER; do not jump around since each level is progressively more difficult.
- Patient identifies the circle that appears 'closest'.
- Test until the patient misses two levels in a row (or the last presentation).
- Record the last level passed successfully.
- For Titmus, a minimum passing score is correctly identifying ALL of the presentations 1 THROUGH 9 which equals 40 seconds of arc.
- Record as the number missed over the number possible.
  - For example, 'Titmus 0/10 – 40 arc sec PASS' or words to that effect.
- If fails the Titmus, may retest using AFVT/OPTEC 2300 or RANDOT.

Refer to Eye Clinic if subject fails depth perception testing:

- misses any presentations within Group B of the AFVT or OPTEC 2300;
- or, misses any of presentations 1 through 7 of the RANDOT;
- or, misses any of the nine presentations of the Titmus.

[Note: The Verhoeff Testing Apparatus is no longer authorized for depth perception testing on FDMEs. 'Grandfathering' this test may be possible but only with supplemental information from Optometry or Ophthalmology and final approval authority from Commander, US Army Aeromedical Center (USAAMC). It will in no case be 'grandfathered' for any Class 1/1A FDME.]